

General

Title

Melanoma: percentage of patients, regardless of age, with a current diagnosis of stage 0 through IIC melanoma or a history of melanoma of any stage, without signs or symptoms suggesting systemic spread, seen for an office visit during the one-year measurement period, for whom no diagnostic imaging studies were ordered.

Source(s)

American Academy of Dermatology. Melanoma: overutilization of imaging studies in melanoma. Schaumburg (IL): American Academy of Dermatology; 2016 Nov 15. 11 p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of patients, regardless of age, with a current diagnosis of stage 0 through IIC melanoma or a history of melanoma of any stage, without signs or symptoms suggesting systemic spread, seen for an office visit during the one-year measurement period, for whom no diagnostic imaging studies were ordered.

This measure is to be reported once per performance period for patients with a current diagnosis of stage 0 through IIC melanoma or a history of melanoma who are seen for an office visit during the performance period. This measure is intended to reflect the quality of services provided for the primary management of patients with melanoma who have an office visit during the performance period.

There are two reporting criteria for this measure:

Patients with a diagnosis of stage 0 through IIC melanoma without signs or symptoms suggesting

systemic spread

OR

Patients with a history of any stage melanoma without signs or symptoms suggesting systemic spread

Although this measure contains two reporting criteria, there is only one reporting rate and one performance rate for this measure.

Rationale

There is no valid indication for expensive imaging studies in early stage melanoma in the absence of signs or symptoms. There is a perception that radiologic studies are being administered for grade 0 and grade I melanoma that are clinically unnecessary and create economic burden to the patient and payer. While diagnostic imaging is also inappropriate for patients with higher stages of melanoma as well, this measure is a first step in addressing the over-utilization of diagnostic imaging studies in patients with melanoma.

Diagnostic imaging is the fastest growing medical expenditure in the United States with an annual 9% growth rate – more than twice that of general medical expenditures. Studies have found overuse of diagnostic imaging and duplication of other types of scans add little or no value. Unnecessary or inappropriate tests not only incur excess expenditures, but may also expose patients to extra risk. For example, the radiation exposure of a computed tomography (CT) scan can be several hundred times that of a chest x-ray. The advances in cardiac imaging have resulted in the inappropriate application of these imaging modalities resulting in substantial, unexplained regional variability and increased attendant costs.

Clinical Recommendation Statements

In asymptomatic patients with localized cutaneous melanoma of any thickness, baseline blood tests and imaging studies are generally not recommended and should only be performed as clinically indicated for suspicious signs and symptoms (Bichakjian et al., 2011).

Routine cross-sectional imaging (CT, positron emission tomography [PET], magnetic resonance imaging [MRI]) is not recommended for patient with localized melanoma. For patients with stage IA melanoma, this is consistent with the National Institutes of Health guideline. For patients with stage IB to IIC, this recommendation is based on the very low yield of detection of subclinical disease. In patients with stage IIB to IIC, chest x-ray is optional. In any patient with localized melanoma, cross-sectional imaging should only be used to investigate specific signs or symptoms (National Comprehensive Cancer Network [NCCN], 2011).

Evidence for Rationale

American Academy of Dermatology. Melanoma: overutilization of imaging studies in melanoma. Schaumburg (IL): American Academy of Dermatology; 2016 Nov 15. 11 p.

Bichakjian CK, Halpern AC, Johnson TM, Foote Hood A, Grichnik JM, Swetter SM, Tsao H, Barbosa VH, Chuang TY, Duvic M, Ho VC, Sober AJ, Beutner KR, Bhushan R, Smith Begolka W, American Academy of Dermatology. Guidelines of care for the management of primary cutaneous melanoma. J Am Acad Dermatol. 2011 Nov;65(5):1032-47. [143 references] [PubMed](#)

National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: melanoma. Fort Washington (PA): National Comprehensive Cancer Network (NCCN); 2011 Apr 1. 51 p.

Primary Health Components

Melanoma (stage 0 through IIC); diagnostic imaging studies; chest x-ray; computed tomography (CT) scan; ultrasound; magnetic resonance imaging (MRI); positron emission tomography (PET); nuclear medicine scans

Denominator Description

All patients, regardless of age, with a current diagnosis of stage 0 through IIC melanoma or a history of melanoma of any stage, without signs or symptoms suggesting systemic spread, seen for an office visit during the one-year measurement period (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

Patients for whom no diagnostic imaging studies were ordered (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

The American Medical Association (AMA)-convened Physician Consortium for Performance Improvement (PCPI) in collaboration with the American Academy of Dermatology conducted a testing project to ensure that the melanoma measures were feasible to implement, valid and reliable. Overall, the measures were found to be valid and reliable.

Face Validity Testing

Face validity of the measure score was assessed for three of the four melanoma measures. The American Academy of Dermatology Quality Metrics Committee members were asked to empirically assess face validity of these measures via online survey. The expert panel consisted of 13 members, whose specialties include oncology, melanoma, dermatology, and surgical oncology.

After the measure was fully specified, the expert panel was asked to rate their agreement with the following statement: "The scores obtained from the measure, as specified, will provide an accurate reflection of quality and can be used to distinguish good and poor quality."

Face Validity Testing Results

Measure Number and Title	N	Mean Rating	Percentage in Top Two Categories (4 and 5)	Frequency Distribution of Ratings*				
				1	2	3	4	5
# 2 Melanoma	10	4.60	100.0%	0	0	0	4	6

Measure Number and Measure Name	N	Mean Rating	Percentage in Top Two Categories (4 and 5)	Frequency Distribution of Ratings*				
#3 Melanoma Recall System Coordination of Care	10	4.50	100.0%	0	0	0	5	5
				1	2	3	4	5
#4 Overutilization of Imaging Studies in Melanoma	10	4.70	90.0%	0	0	1	1	8

*Scale from 1-5, where 1 (Strongly Disagree); 3 (Neither Agree nor Disagree); 5 (Strongly Agree)

Reliability Testing

Inter-rater reliability testing (i.e., manual review of the patient medical record by two trained clinical abstractors and comparison of their individual findings) was conducted at three dermatology practice sites on three of the four melanoma measures (i.e., measures 2, 3 and 4). These sites represent various types, locations, and sizes. Kappa statistics were calculated at the data element level for the denominator, numerator and exceptions categories. Data element reliability was established based on the results of this analysis.

Reliability Testing Results

The PCPI measure testing project revealed that the data elements for measure 2 demonstrated moderate to almost perfect reliability, the data elements for measure 3 demonstrated fair to almost perfect reliability and the data elements for measure 4 demonstrated moderate to almost perfect reliability in the numerator category.

Evidence for Extent of Measure Testing

American Academy of Dermatology, American Medical Association (AMA)-convened Physician Consortium for Performance Improvement®, National Committee for Quality Assurance. Melanoma II physician performance measurement set. Chicago (IL): American Medical Association (AMA); 2012 Nov. 28 p.

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Ambulatory/Office-based Care

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Individual Clinicians or Public Health Professionals

Statement of Acceptable Minimum Sample Size

Does not apply to this measure

Target Population Age

All patients, regardless of age

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Living with Illness

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding Period

The one-year measurement period

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Encounter

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

Reporting Criteria 1:

All patients, regardless of age, with a current diagnosis of stage 0 through IIC melanoma, without signs or symptoms suggesting systemic spread, seen for an office visit during the one-year measurement period

Denominator Criteria (Eligible Cases) Reporting Criteria 1:

Diagnosis for melanoma (refer to the original measure documentation for International Classification of Diseases, Tenth Revision, Clinical Modification [ICD-10-CM] codes)

AND

Patient encounter during the performance period (refer to the original measure documentation for Current Procedural Terminology [CPT] codes)

WITHOUT

Telehealth Modifier (refer to the original measure documentation for Telehealth Modifiers)

AND

AJCC Melanoma Cancer Stage 0 through IIC Melanoma (refer to the original measure documentation for Healthcare Common Procedure Coding System [HPCPS] codes)

AND

Absence of signs of melanoma (cough, dyspnea, tenderness, localized neurologic signs such as weakness, jaundice, or any other sign suggesting systemic spread) or absence of symptoms of melanoma (pain, paresthesia, or any other symptom suggesting the possibility of systemic spread of melanoma) (refer to the original measure documentation for HPCPS codes)

Reporting Criteria 2:

All patients, regardless of age, with a history of melanoma of any stage, without signs or symptoms suggesting systemic spread, seen for an office visit during the one-year measurement period

Denominator Criteria (Eligible Cases) Reporting Criteria 2:

Diagnosis for history of melanoma (refer to the original measure documentation for ICD-10-CM codes)

AND

Patient encounter during the performance period (refer to the original measure documentation for CPT codes)

WITHOUT

Telehealth Modifier (refer to the original measure documentation for Telehealth Modifiers)

AND

Absence of signs of melanoma (cough, dyspnea, tenderness, localized neurologic signs such as weakness, jaundice, or any other sign suggesting systemic spread) or absence of symptoms of melanoma (pain, paresthesia, or any other symptom suggesting the possibility of systemic spread of melanoma) (refer to the original measure documentation for HPCPS codes)

Note:

Signs: For the purposes of this measure, signs include tenderness, jaundice, localized neurologic signs such as weakness, or any other sign.

Symptoms: For the purposes of this measure, symptoms include cough, dyspnea, pain, paresthesia, or any other symptom.

Exclusions

Unspecified

Exceptions

Documentation of medical reason(s) for ordering diagnostic imaging studies (e.g., patient has comorbid condition that warrants imaging, other medical reasons)

OR

Documentation of system reason(s) for ordering diagnostic imaging studies (e.g., requirement for clinical trial enrollment, ordered by another provider, other system reasons)

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

Patients for whom no diagnostic imaging studies were ordered

Note:

Diagnostic Imaging Studies: Chest x-ray (CXR), computed tomography (CT), ultrasound, magnetic resonance imaging (MRI), positron emission tomography (PET), and nuclear medicine scans. Ordering any of these imaging studies during the one year measurement period is considered a failure of the measure, unless a justified reason is documented through use of a medical or system reason for exception.

Refer to the original measure documentation for administrative codes.

Exclusions

Unspecified

Numerator Search Strategy

Fixed time period or point in time

Data Source

Administrative clinical data

Registry data

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

- 2017 Registry Individual Measure Flow: #224 NQF #0562: Melanoma: Overutilization of Imaging Studies in Melanoma – Reporting Criteria One
- 2017 Registry Individual Measure Flow: #224 NQF #0562: Melanoma: Overutilization of Imaging Studies in Melanoma – Reporting Criteria Two

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Identifying Information

Original Title

Measure #224: melanoma: overutilization of imaging studies in melanoma.

Measure Collection Name

Melanoma Measures

Submitter

Developer

American Academy of Dermatology - Medical Specialty Society

National Committee for Quality Assurance - Health Care Accreditation Organization

Physician Consortium for Performance Improvement® - Clinical Specialty Collaboration

Funding Source(s)

Unspecified

Composition of the Group that Developed the Measure

Melanoma Work Group: Dirk Elston, MD (*Co-Chair*; dermatology); Raj Behal, MD, MPH (*Co-Chair*; methodology); Steven D. Bines, MD (general surgery); Peter Dandalides, MD (health plan); Evan R. Farmer, MD (dermatology); Rutledge Fournay, MD (dermatology); Andrea Gelzer, MD, MS, FACP (health plan); Robert T. Gilson, MD (dermatology); Stephen E. Helms, MD (dermatology); Abrar Qureshi, MD (dermatology); Todd Schlessinger, MD (dermatology); John Schneider, MD, PhD (family medicine); Arthur Joel Sober, MD (dermatology); Steven W. Strode, MD, MEd, MPH (family medicine); Janet (Jessie) Sullivan, MD (dermatology); William Wooden, MD (plastic surgery)

American Academy of Dermatology: Sandra Peters, MHA; Alison Shippy, MPH; Carol Sieck, RN, MSN

American Medical Association: Mark Antman, DDS, MBA; Kendra Hanley, MS; Diedra Gray, MPH; Karen S. Kmetik, PhD; Kimberly Smuk, RHIA

National Committee for Quality Assurance: Benjamin N. Hamlin, MPH; Phil Renner, MBA

Centers for Medicare & Medicaid Services: Susan Nedza, MD, MBA, FACEP; Sylvia Publ, MBA, RHIA

Facilitators: Timothy F. Kresowik, MD; Rebecca A. Kresowik

Financial Disclosures/Other Potential Conflicts of Interest

Conflicts, if any, are disclosed in accordance with the Physician Consortium for Performance Improvement® conflict of interest policy.

Measure Initiative(s)

Physician Quality Reporting System

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2016 Nov

Measure Maintenance

Unspecified

Date of Next Anticipated Revision

Unspecified

Measure Status

This is the current release of the measure.

This measure updates a previous version: American Academy of Dermatology, American Medical Association (AMA)-convened Physician Consortium for Performance Improvement®, National Committee for Quality Assurance. Melanoma II physician performance measurement set. Chicago (IL): American Medical Association (AMA); 2012 Nov. 28 p.

Measure Availability

Source available from the [American Academy of Dermatology \(AAD\) Web site](#) .

For more information, contact the AAD at 930 E. Woodfield Road Schaumburg, IL 60173; Phone: 847-240-3376; Fax: 847-240-1859; Web site: www.aad.org .

NQMC Status

This NQMC summary was completed by ECRI Institute on October 2, 2007. The information was verified by the measure developer on November 21, 2007.

This NQMC summary was edited by ECRI Institute on September 1, 2009.

This NQMC summary was retrofitted into the new template on June 7, 2011.

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This NQMC summary was updated by ECRI Institute on September 3, 2013.

Stewardship for this measure was transferred from the PCPI to the American Academy of Dermatology. The American Academy of Dermatology informed NQMC that this measure was updated. This NQMC summary was updated again by ECRI Institute on April 28, 2017. The information was not verified by the measure developer.

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The AMA's, PCPI's and National Committee for Quality Assurance's significant past efforts and contributions to the development and updating of the Measure is acknowledged. AAD is solely responsible for the review and enhancement ("Maintenance") of the Measures as of June 30, 2014.

AAD encourages use of the Measure by other health care professionals, where appropriate.

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Production

Source(s)

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